

What is claimed is:

1. A method for producing L-aspartic acid comprising:
treating an ammonium fumarate solution with
aspartase to generate an ammonium L-aspartate
solution;

adding fumaric acid to said solution; and
then crystallizing L-aspartic acid from said
solution,

wherein fumaric acid is added to said ammonium L-
aspartate solution after said solution has been heated
to 50 to 130°C in an amount 0.4 to 0.8 times the total
amount of fumarate and the L-aspartate contained
therein in terms of mole, and the resultant mixture is
(once) turned into a homogeneous solution by applying
thereto a shearing force, and then L-aspartic acid is
deposited therefrom.

2. The method according to claim 1, wherein the
temperature of resultant suspension containing L-
aspartic acid crystals is in the range from 25 to 100°C
when the deposited L-aspartic acid is separated
therefrom.

3. The method according to claim 1, wherein said
homogeneous solution is retained at 50 to 130 °C for
0.1 second to 1 hour.

4. The method according to claim 1, wherein moisture-
containing fumaric acid crystals and said ammonium L-
aspartate solution are mixed continuously.

5. The method according to claim 1, wherein said

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solution is cooled at a rate of 0.1-5°C/min from the temperature at which fumaric acid is added thereto to the temperature at which crystallized L-aspartic acid is separated therefrom, to thereby deposit L-aspartic acid.

6. The method according to claim 5, wherein the cooling is performed by evaporating water under reduced pressure; condensing the evaporated water by cooling through a condenser; and returning the condensed water to a reactor for L-aspartic acid crystallization or removing the condensed water.

7. The method according to claim 6, wherein pressure reduction at the time of cooling under reduced pressure is performed at a rate of 1-20 torr/min from a range of pressure 10-200 torr higher than the vapor pressure at which the solution to be cooled begins to boil.

8. The method according to claim 1, wherein the crystallizing step is performed by a continuous method.

9. The method according to claim 1, wherein a said ammonium fumarate solution is prepared from a mother liquor from which L-aspartic acid crystals have been removed.

10. A method for producing L-aspartic acid

comprising:

treating an ammonium fumarate solution with aspartase to generate an ammonium L-aspartate solution;

adding fumaric acid to said solution; and
then crystallizing L-aspartic acid from said
solution,
wherein said solution is cooled at a rate of 0.1-5°C
/min from the temperature at which fumaric acid is
added thereto to the temperature at which crystallized
L-aspartic acid is separated therefrom, to thereby
deposit L-aspartic acid.

11. The method according to claim 10, wherein the
solution from which L-aspartic acid is deposited is a
homogeneous solution.

12. The method according to claim 10, wherein the
cooling is performed by evaporating water under
reduced pressure; condensing the evaporated water by
cooling through a condenser; and returning the
condensed water to a reactor for L-aspartic acid
crystallization or removing the condensed water.

13. The method according to claim 12, wherein
pressure reduction at the time of cooling under
reduced pressure is performed at a rate of 1-20
torr/min from a range of pressure 10-200 torr higher
than the vapor pressure at which the solution to be
cooled begins to boil.

14. The method according to claim 10, wherein a said
ammonium fumarate solution is prepared from a mother
liquor from which L-aspartic acid crystals have been
removed.